Assignment 5: Creating a flex dashboard for the NMES data

Due Tuesday, December 19, 2023 @ 11:59pm

Public Health 280.346, Fall 2023 Your assignment for this module is to create a flex dashboard using Shiny that allows a user to graphically explore the relationship between medical expenditures and a set of other variables in the dataset.

You can use the `Assignment5_template.Rmd` file to do your work; this file contains the code from the MPG flex dashboard we looked at in class. Modify/add to this code in order to create your our dashboard. When completed, please submit your assignment through Github.

Your flex dashboard should have the following things:

(1) Allow user to select from at least 3 different variables in the NMES data set using `selectInput()`

(2) Allow user to specify whether or not they want to log10 transform the medical expenditure variable using `checkboxInput()`.

(3) [Extra credit] Allow user to specify a second (categorical) variable on which to stratify/facet the graphical results using `selectInput()`.

(4) Produce a graph using `ggplot()` that shows the relationship between medical expenditures (or log10 medical expenditures) and the user's chosen variable, possibly stratified/faceted by a third variable (for extra credit).

(5) Feel free to add additional options/plots if you'd like to as well!

Note: The type of graph you make will depend on whether the user's chosen variable is continuous or categorical. To make it simpler on yourself, you might only allow the user to chose from *one type* of variable, such as only continuous variables or only categorical variables. Alternatively, you can allow for both and use `if()` statements to specify which plot you will want to make (this is a bit harder).